

11720 North Creek Pkwy N, Suite 400, Bothell, WA 98011-8244 East 11115 Montgomery, Suite B, Spokane, WA 99206-4776 9405 S.W. Nimbus Avenue, Beaverton, OR 97008-7132 20332 Empire Avenue, Suite F-1, Bend, OR 97701-5711

(425) 420-9200 FAX 420-9210 (509) 924-9200

(541) 383-9310

924-9290 (503) 906-9200

Fax 906-9210 FAX 382-7588

CHAIN OF CUSTODY REPORT

Work Orden #

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CLIENT: BRISTOL	PROGRAMMO					INVOICE TO:						1.1	TURNAROUND REQUEST in Business Days*						
REPORT TO: AME	KRAN	T	TER	Taxaba (CA)		BRI	STC	L									nic & Inorganic Analyse		
ADDRESS: AMCHIT	TCA ISL	AND,	AL	TSK	A								10 7 5 4 3 2 1 <1						
PHONE: 907.770					-	P.O. NUMBER: 21090							STD. Petroleum Hydrocarbon Analyses 5 4 3 2 1 < 1 < 1						
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2.01AMAGTOSSL	6/23/01	1455	V	-											5	2			
3.01AMA9TO65L	6/23/01	1500	4	4											5	7			
4.01AMA9TO75C	6/23/01	1505	6	6								* /			5				
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425.420.9200 fax 425.420.9210

Spokane East 11115 Montgomery, Suite B, Spokane, WA 99206-4776

509.924.9200 fax 509.924.9290

Portland 9405 SW Nimbus Avenue, Beaverton, OR 97008-7132 503.906.9200 fax 503.906.9210

Bend 20332 Empire Avenue, Suite F-1, Bend, OR 97701-5711 541.383.9310 fax 541.382.7588

6 December, 2001

Anne Kranawetter Bristol Environmental & Engineering 2000 W International Airport C#1 Anchorage, AK 99502-1116

RE: Amchitka

Enclosed are the results of analyses for samples received by the laboratory on 06/23/01 15:35. If you have any questions concerning this report, please feel free to contact me.

This report was recreated from a previously issued final report in order to provide an electronic copy. The final report used for these electronic copies may have been previously issued as an amended report due to client requested changes to sample names, etc. No data has changed since submission of the previously issued final, or amended, report.

Sincerely,

Stephen Wilson

Environmental Group Leader

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Work Orders included in this report:

M106071



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541.383.9310 fax 541.382.7588

Bristol Environmental & Engineering Project: Amchitka 2000 W International Airport C#1 Project Number: 21090

Reported:

Anchorage, AK 99502-1116 Project Manager: Anne Kranawetter

06/25/01 08:52

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
01AMA9T04SL	M106071-01	Soil	06/23/01 14:50	06/23/01 15:35
01AMA9T05SL	M106071-02	Soil	06/23/01 14:55	06/23/01 15:35
01AMA9T06SL	M106071-03	Soil	06/23/01 15:00	06/23/01 15:35
01AMA9T07SL	M106071-04	Soil	06/23/01 15:05	06/23/01 15:35
01AMA9T08SL	M106071-05	Soil	06/23/01 15:10	06/23/01 15:35
01AMA9T09SL	M106071-06	Soil	06/23/01 15:15	06/23/01 15:35

C. O. C. # 108

North Creek Analytical - Mobile Lab



Seattle 11720 North Creek Pkwy N, Suite 400, Bothell, WA 98011-9223 425.420.9200 fax 425.420.9210

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Bristol Environmental & Engineering 2000 W International Airport C#1

Project: Amchitka Project Number: 21090

Reported:

Anchorage, AK 99502-1116

Project Manager: Anne Kranawetter

06/25/01 08:52

Diesel Hydrocarbons (C10-C25) per AK102 North Creek Analytical - Mobile Lab

Analyte	Result	Reporting Limit	Units	Dilution	Method	Prepared	Analyzed	Batch	Notes
01AMA9T04SL (M106071-01) Soil					Sampled: 06	/23/01 Rece	eived: 06/23/	01	
Diesel Range Organics	396	150	mg/kg dry	1	AK 102	06/23/01	06/24/01	0106075	
Surr: 1-Chlorooctadecane	88.3 %	50-150							
Surr: Triacontane	74.6 %	50-150							
01AMA9T05SL (M106071-02) Soil					Sampled: 06	/23/01 Rece	eived: 06/23/	01	
Diesel Range Organics	ND	150	mg/kg dry	1	AK 102	06/23/01	06/24/01	0106075	
Surr: 1-Chlorooctadecane	86.8 %	50-150							
Surr: Triacontane	89.5 %	50-150							
01AMA9T06SL (M106071-03) Soil					Sampled: 06	/23/01 Rece	eived: 06/23/	01	
Diesel Range Organics	ND	150	mg/kg dry	1	AK 102	06/23/01	06/24/01	0106075	
Surr: 1-Chlorooctadecane	82.0 %	50-150							
Surr: Triacontane	76.9 %	50-150							
01AMA9T07SL (M106071-04) Soil					Sampled: 06	/23/01 Rece	eived: 06/23/	01	
Diesel Range Organics	ND	150	mg/kg dry	1	AK 102	06/23/01	06/24/01	0106075	
Surr: 1-Chlorooctadecane	95.7 %	50-150							
Surr: Triacontane	99.6 %	50-150							
01AMA9T08SL (M106071-05) Soil					Sampled: 06	/23/01 Rece	eived: 06/23/	01	
Diesel Range Organics	ND	150	mg/kg dry	1	AK 102	06/23/01	06/24/01	0106075	
Surr: 1-Chlorooctadecane	81.5 %	50-150							
Surr: Triacontane	74.7 %	50-150							
01AMA9T09SL (M106071-06) Soil					Sampled: 06	/23/01 Rece	eived: 06/23/	01	
Diesel Range Organics	252	150	mg/kg dry	1	AK 102	06/23/01	06/24/01	0106075	
Surr: 1-Chlorooctadecane	84.4 %	50-150							
Surr: Triacontane	85.1 %	50-150							

North Creek Analytical - Mobile Lab



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425.420.9200 fax 425.420.9210

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509.924.9200 fax 509.924.9290

Portland 9405 SW Nimbus Avenue, Beaverton, OR 97008-7132 503.906.9200 fax 503.906.9210

Bend 20332 Empire Avenue, Suite F-1, Bend, OR 97701-5711 541.383.9310 fax 541.382.7588

Bristol Environmental & Engineering Project: Amchitka 2000 W International Airport C#1 Project Number: 21090

Anchorage, AK 99502-1116 Project Manager: Anne Kranawetter 06/25/01 08:52

BTEX,MTBE and Naphthalene per EPA Method 8021B North Creek Analytical - Mobile Lab

Analyte	Result	Reporting Limit	Units	Dilution	Method	Prepared	Analyzed	Batch	Notes
01AMA9T04SL (M106071-01) Soil					Sampled: 06/	/23/01 Rece	eived: 06/23/	01	
Benzene	ND	0.0574	mg/kg dry	50	!1B BTEX/MT	Π 06/24/01	06/24/01	0106080	
Toluene	ND	0.230	"	"	"	"	"	"	
Ethylbenzene	ND	0.230	"	"	"	"	"	"	
Xylenes (total)	ND	0.460	"	"	"	"	"	"	
Naphthalene	ND	2.30	"	"	"	"	"	"	
Surr: 4-BFB	84.8 %	50-150							
01AMA9T05SL (M106071-02) Soil					Sampled: 06/	/23/01 Rece	eived: 06/23/	01	
Benzene	ND	0.0683	mg/kg dry	50	!1B BTEX/MT	Π 06/24/01	06/24/01	0106080	
Toluene	ND	0.273	"	"	"	"	"	"	
Ethylbenzene	ND	0.273	"	"	"	"	"	"	
Xylenes (total)	ND	0.546	"	"	"	"	"	"	
Naphthalene	ND	2.73	"	"	"	"	"	"	
Surr: 4-BFB	81.6 %	50-150							
01AMA9T06SL (M106071-03) Soil					Sampled: 06/	/23/01 Rece	eived: 06/23/	01	
Benzene	ND	0.0399	mg/kg dry	50	!1B BTEX/MT	Π 06/24/01	06/24/01	0106080	
Toluene	ND	0.160	"	"	••	"	"	"	
Ethylbenzene	ND	0.160	"	"	"	"	"	"	
Xylenes (total)	ND	0.319	"	"	"	"	"	"	
Naphthalene	ND	1.60	"	"	"	"	"	"	
Surr: 4-BFB	80.1 %	50-150							
01AMA9T07SL (M106071-04) Soil					Sampled: 06/	/23/01 Rece	eived: 06/23/	01	
Benzene	ND	0.0649	mg/kg dry	50	!1B BTEX/MT	Π 06/24/01	06/24/01	0106080	
Toluene	ND	0.260	"	"	"	"	"	"	
Ethylbenzene	ND	0.260	"	"	"	"	"	"	
Xylenes (total)	ND	0.519	"	"	"	"	"	"	
Naphthalene	ND	2.60	"	"	"	"	"	"	
Surr: 4-BFB	82.1 %	50-150							

North Creek Analytical - Mobile Lab



Anchorage, AK 99502-1116

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425.420.9200 fax 425.420.9210 **Spokane** East 11115 Montgomery, Suite B, Spokane, WA 99206-4776

509.924.9200 fax 509.924.9290 **Portland** 9405 SW Nimbus Avenue, Beaverton, OR 97008-7132

503.906.9200 fax 503.906.9210

Bend 20332 Empire Avenue, Suite F-1, Bend, OR 97701-5711

541.383.9310 fax 541.382.7588

Bristol Environmental & Engineering Project: Amchitka 2000 W International Airport C#1 Project Number: 21090

Reported: 06/25/01 08:52

Project Manager: Anne Kranawetter

BTEX,MTBE and Naphthalene per EPA Method 8021B North Creek Analytical - Mobile Lab

Analyte	Result	Reporting Limit	Units	Dilution	Method	Prepared	Analyzed	Batch	Notes
01AMA9T08SL (M106071-05) Soil					Sampled: 06/2	23/01 Rece	eived: 06/23/	01	
Benzene	ND	0.0474	mg/kg dry	50	!1B BTEX/MT	1 06/24/01	06/24/01	0106080	
Toluene	ND	0.190	"	"	"	"	"	"	
Ethylbenzene	ND	0.190	"	"	"	"	"	"	
Xylenes (total)	ND	0.379	"	"	"	"	"	"	
Naphthalene	ND	1.90	"	"	"	"	"	"	
Surr: 4-BFB	75.4 %	50-150							
01AMA9T09SL (M106071-06) Soil					Sampled: 06/2	23/01 Rece	eived: 06/23/	01	
Benzene	ND	0.0883	mg/kg dry	50	!1B BTEX/MT	1 06/24/01	06/24/01	0106080	
Toluene	ND	0.353	"	"	"	"	"	"	
Ethylbenzene	ND	0.353	"	"	"	"	"	"	
Xylenes (total)	ND	0.706	"	"	"	"	"	"	
Naphthalene	ND	3.53	"	"	"	"	"	"	
Surr: 4-BFB	78.8 %	50-150							

North Creek Analytical - Mobile Lab



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Bristol Environmental & Engineering 2000 W International Airport C#1

Project: Amchitka Project Number: 21090

Reported: 06/25/01 08:52

Anchorage, AK 99502-1116

Project Manager: Anne Kranawetter

Physical Parameters per APHA/ASTM/EPA Methods North Creek Analytical - Mobile Lab

Analyte	Result	Reporting Limit Uni	ts Dilution	Method	Prepared	Analyzed	Batch	Notes
01AMA9T04SL (M106071-01) Soil				Sampled: 06/	23/01 Rece	eived: 06/23/0	01	
% Solids	88.2	0.0100 % by W	Veight 1	Gravimetric	06/23/01	06/24/01	0106076	
01AMA9T05SL (M106071-02) Soil				Sampled: 06/	23/01 Rece	eived: 06/23/0	01	
% Solids	89.2	0.0100 % by W	Veight 1	Gravimetric	06/23/01	06/24/01	0106076	
01AMA9T06SL (M106071-03) Soil				Sampled: 06/	23/01 Rece	eived: 06/23/0	01	
% Solids	75.6	0.0100 % by W	Veight 1	Gravimetric	06/23/01	06/24/01	0106076	
01AMA9T07SL (M106071-04) Soil				Sampled: 06/	23/01 Rece	eived: 06/23/0	01	
% Solids	90.2	0.0100 % by W	Veight 1	Gravimetric	06/23/01	06/24/01	0106076	
01AMA9T08SL (M106071-05) Soil				Sampled: 06/	23/01 Rece	eived: 06/23/0	01	
% Solids	82.6	0.0100 % by W	Veight 1	Gravimetric	06/23/01	06/24/01	0106076	
01AMA9T09SL (M106071-06) Soil				Sampled: 06/	23/01 Rece	eived: 06/23/0	01	
% Solids	81.7	0.0100 % by W	Veight 1	Gravimetric	06/23/01	06/24/01	0106076	

North Creek Analytical - Mobile Lab



2000 W International Airport C#1

Seattle 11720 North Creek Pkwy N, Suite 400, Bothell, WA 98011-9223

%REC

Reported:

RPD

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Source

Spokane East 11115 Montgomery, Suite B, Spokane, WA 99206-4776

509.924.9200 fax 509.924.9290

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503.906.9200 fax 503.906.9210 **Bend** 20332 Empire Avenue, Suite F-1, Bend, OR 97701-5711 541.383.9310 fax 541.382.7588

Bristol Environmental & Engineering Project: Amchitka

Anchorage, AK 99502-1116 Project Manager: Anne Kranawetter 06/25/01 08:52

Project Number: 21090

Reporting

Diesel Hydrocarbons (C10-C25) per AK102 - Quality Control

North Creek Analytical - Mobile Lab

Analyte	Result	Limit Units	Level	Result	%REC	Limits	RPD	Limit	Notes
Batch 0106075 - 3545 ASE									
Blank (0106075-BLK1)			Prepare	ed: 06/23/0	1 Analyz	ed: 06/24/0)1		
Diesel Range Organics	ND	150 mg/kg wet							
Surr: 1-Chlorooctadecane	21.9	"	23.4		93.6	50-150			
Surr: Triacontane	17.6	"	23.4		75.2	50-150			
LCS (0106075-BS1)			Prepare	ed: 06/23/0	1 Analyz	ed: 06/24/0)1		
Diesel Range Organics	1310	150 mg/kg wet	1250		105	75-125			
Surr: 1-Chlorooctadecane	29.4	"	23.4		126	50-150			
Surr: Triacontane	20.2	"	23.4		86.3	50-150			
LCS Dup (0106075-BSD1)			Prepare	ed: 06/23/0	1 Analyz	ed: 06/24/0)1		

LCS Dup (0106075-BSD1)	Prepared: 06/23/01 Analyzed: 06/24/01							
Diesel Range Organics	1310	150 mg/kg wet	1250	105	75-125	0	20	
Surr: 1-Chlorooctadecane	27.1	"	23.4	116	50-150			
Surr: Triacontane	19.5	"	23.4	83.3	50-150			

Matrix Spike (0106075-MS1)	Source	Source: M106067-01			Prepared: 06/23/01 Analyzed: 06/24/01				
Diesel Range Organics	1820	150 mg/kg dry	1760	ND	98.6	60-140			
Surr: 1-Chlorooctadecane	37.8	"	33.0		115	50-150			
Surr: Triacontane	27.5	"	33.0		83.3	50-150			

North Creek Analytical - Mobile Lab



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Bristol Environmental & Engineering 2000 W International Airport C#1

Project: Amchitka
Project Number: 21090

Reported:

Anchorage, AK 99502-1116

Project Manager: Anne Kranawetter

06/25/01 08:52

BTEX,MTBE and Naphthalene per EPA Method 8021B - Quality Control

North Creek Analytical - Mobile Lab

		Reporting		Spike	Source		%REC		RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes

Batch 0106080 - MeOH Extraction					
Blank (0106080-BLK1)			Prepared & A	nalyzed: 06/24/0	01
Benzene	ND	0.0250 mg/kg wet			
Toluene	ND	0.100 "			
Ethylbenzene	ND	0.100 "			
Xylenes (total)	ND	0.200 "			
Naphthalene	ND	1.00 "			
Surr: 4-BFB	2.23	"	2.50	89.2	50-150
LCS (0106080-BS1)			Prepared: 06/2	24/01 Analyzed:	: 12/25/01
Benzene	2.14	0.0250 mg/kg wet	2.50	85.6	59-138
Toluene	2.15	0.100 "	2.50	86.0	53-151
Ethylbenzene	2.32	0.100 "	2.50	92.8	51-141
Xylenes (total)	6.53	0.200 "	7.50	87.1	52-141
Naphthalene	2.86	1.00 "	2.50	114	55-135
Surr: 4-BFB	2.32	"	2.50	92.8	50-150

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Bristol Environmental & Engineering 2000 W International Airport C#1 Project Number: 21090

Project Manager: Anne Kranawetter

Project: Amchitka

Reported: 06/25/01 08:52

Notes and Definitions

DET Analyte DETECTED

Anchorage, AK 99502-1116

ND Analyte NOT DETECTED at or above the reporting limit

NR Not Reported

dry Sample results reported on a dry weight basis. MRLs are adjusted if %Solids are less than 50%.

wet Sample results reported on a wet weight basis (as received)

RPD Relative Percent Difference

North Creek Analytical - Mobile Lab

Items for Project Manager Review

LabNumber	Analysis	Analyte	Exception
			Report recreated from:
			\\sisters\elmnt\Report\M106071 FINAL 06 25 01
			0852.mdb
			Default Report (not modified)